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RESEARCH MEMORANDUM

CLOSE-IN-H-BOMB EFFECTS

H. L. Brode

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SUPPLEMENT TO RM-1583-1

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The following figures (Figure 27 and Figure 28) together with the data below represent the relations between the overpressure impulse, the dynamic impulse, the peak overpressure and the distance from a one MT surface burst. The impulses are defined as follows:

$$I_p^+ = \int_{t_s}^{D_p^+} \Delta P dt \quad (\text{atmos} - \text{sec.})$$

$$I_Q^+ = \frac{1}{2} \int_{t_s}^{D_u^+} \rho u^2 dt \quad (\text{atmos} - \text{sec.})$$

ΔP (atmos)	I_p^+	I_Q^+	R(kft)
900	7.84	2.53	.695
699	7.41	2.47	.755
452	6.55	2.27	.874
297	5.81	2.09	.994
203	5.30	1.94	1.120
99.9	4.43	1.76	1.395
69.9	3.84	1.61	1.62
52.7	3.51	1.51	1.78
30.6	2.84	1.32	2.17
20.7	2.37	1.22	2.51
14.8	2.07	1.12	2.82
10.6	1.75	1.03	3.19
7.34	1.46	0.913	3.64
4.91	1.18	0.768	4.24
3.03	0.960	0.549	5.30
2.02	0.834	0.372	6.20
0.987	0.617	0.152	8.70
0.497	0.460	0.0607	12.59